Summary of the
Field Measurements *Ad Hoc* Committee Meeting
February 3, 1997

The National Environmental Laboratory Accreditation Conference (NELAC) Field Measurements *Ad Hoc* Committee met from 10:30 a.m. to 5 p.m. Eastern Standard Time on February 3, 1997. The meeting was led by Dr. Barton Simmons of the California EPA (CA-EPA). A list of action items is given in Attachment A. A list of Committee members/invited guests is given in Attachment B.

INTRODUCTION

The purpose of the meeting was to report on past action items and seek consensus on a proposed terminology issue; on the survey questionnaire format and implementation; and on using the Accreditation and Certification Criteria for Measurement of Emissions (ACME) information as a standard. The following items were discussed:

STATUS OF ACME

ACME will include leak detection and repair information in the standards. ACME information is available on the World Wide Web (WWW). A question was raised about what was the next step with ACME. The Committee agreed that future action will be decided after the survey results are in.

COMMITTEE FEEDBACK ON CERTIFICATION OF PERSONNEL

A question was raised about whether individuals will be accredited by NELAC. The Committee indicated that this issue will be addressed in the Program Policy and Structure Committee session. The closure of weapons bases was mentioned: as the cleanup progresses, more work will need to be done in the field and the fieldwork will be a large new source of data.

John Scalera of the National Laboratory Lead Accreditation Program (NLLAP) spoke. NLLAP recognizes field operation laboratories. The program has specific requirements for personnel. Personnel must be trained for the laboratory to be accredited; the lab manager must be a technical manager (chemist, biologist, etc.). It was noted that certification of the sampler is not enough; quality control (QC) standards must apply to the entire sampling and analysis process.

Question were raised about whether field standards are separate or part of NELAC and whether sampler certification belongs under NELAC. Also discussed was whether these issues fit into policy and structure considerations. It was noted that in the future more laboratory analysis will be done in the field and the definition of a laboratory is critical.

STATUS OF COMMITTEE

It was proposed that the Field Measurement Committee's status be elevated from *ad hoc* to full committee status. The committee's standing and scope of activity need to be addressed. The pros and cons for elevation to full committee status were listed. It was determined that this issue needs to be on the agenda of the Third NELAC Interim Meeting, pushing a decision on full committee status to 1998. This discussion was put off. A short discussion followed on the overlap between Field Measurements and Field Sampling that are also covered under the Program Policy and Structure Committee. ACME covers both; sometimes they are inseparable.

FRAMEWORK FOR SAMPLING

How will NELAC deal with field sampling? Comment was made on the complexity of a quality system for sampling personnel. Maude Bullock of the U.S. Navy discussed two Navy draft documents: 1) a new chapter in an environmental policy document and 2) the field compliance manual. The first has two sections: 1) uniform standards for sampling and 2) uniform standards for laboratory testing. The document establishes quality system standards for sampling personnel. Copies were distributed to meeting participants. The compliance manual is available in hard copy and on CD ROM.

The Committee discussed adding questions to the survey requesting information on other organizations that may already have developed standards.

Discussions were held regarding field sampling factors including sampling design and planning. Comments were made about how NELAC will address the roles and responsibilities of overseeing sampling standards. It was noted that the U.S. Environmental Protection Agency (USEPA) has programs in place for validating measurement technologies, based on ISO Guide 14000. A question was raised about whether the committee will be involved in certifying technologies or methodologies. It was pointed out that Section 5.10.2 of the program book for this meeting addresses test methods. It was noted that auditors must be trained to know if the validation methods used are sound and that the organization must have a system to certify methods.

Mike Carter of DOE made the point that emphasis should be placed on the validity of the data rather than on the method. The data should meet requirements; furthermore, the use of a required method could result in improper data. The Committee was referred to Appendix C of Chapter 5, which discusses demonstration of method performance. A question was raised about whether performance-based methods can be expanded to include nonstandard field methods.

SCREENING DATA VERSUS DEFINITIVE DATA

The Committee discussed the use and usefulness of the definitions of screening data vs. definitive data. It was noted that these definitions are used by the Superfund project. Quality Assurance (QA) considerations hold that the data should be of a certain quality and that screening data are appropriate for a screening mission but not for more definitive uses. Are these two categories of data useful? One needs confidence in the quality of data used to make a decision. A question was

raised about whether screening data can be used for compliance activities. The usefulness of screening data depends on the requirements of the program. It was suggested that the screening/definitive issue be addressed in the Quality Systems Committee meeting. It was noted that screening data are used to make decisions regarding polychlorinated biphenyls (PCBs) in drinking water.

Again, reference was made to the increasingly greater use of field testing and a question was raised about whether screening should be included with other methods. It was noted that if screening methods are subject to certification, then they may lose their cost-effectiveness.

The Committee agreed that

- movement to a quality system's approach will eliminate the distinction between screening and definitive data,
- screening should be incorporated into the Quality System,
- screening labs should be pulled into the system,
- performance-based methods should be pursued,
- and data quality objectives (DQOs) should be defined.

The Committee agreed that this discussion should be continued in the Quality Systems Committee meeting.

SURVEY DEVELOPMENT

Development of the survey was discussed. Questions in the survey instrument were reworded and more information will be requested. The following questions will be included in the survey:

1. Should NELAC develop standards for organizations conducting the following field activities?
   a. Air emission source sampling
   b. On-site soil and water analysis
   c. Soil gas sampling and analysis
   d. soil sampling
   e. water sampling
   f. ambient air sampling
   g. indoor air sampling
   h. industrial hygiene sampling
   i. other_____

2. Should NELAC develop standards for certification of individuals for the following field activities?

a. Air emission source sampling
b. On-site soil and water analysis
c. Soil gas sampling and analysis
d. soil sampling
e. water sampling
f. ambient air sampling
g. indoor air sampling
h. industrial hygiene sampling
i. other_____

For both questions, the list of activities will be taken from question #2 of the current survey. One column will allow the respondents to answer "yes" or "no" and another column will ask them to rank the priorities for those items to which they answered "yes."

Additional survey categories will include: solid and hazardous waste, sediments, continuous air monitoring, continuous water monitoring, and biological indices (e.g., species).

The survey will also ask respondents the following questions:

- Are you a member of the NELAC House of Representatives?
- Are you a member of the NELAC House of Delegates?
- Are you a contributor to NELAC?
- Are you familiar with NELAC standards?
- What is your area of expertise?

Alternatively, the categories in the NELAC announcement were suggested. The survey will be distributed using direct mail and the Internet to all affected parties, including delegates and representatives, and those on the NELAC mailing list. Concern was raised that at least two other committees are planning surveys.

Attachment A

ACTION ITEMS
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Item No.	Action	Date Completed
1.	Distribute the ACME home page address to the Committee.	
2.	Attend the Program Policy and Structure Committee meeting.	
3.	The Program Policy and Structure Committee will discuss certification of personnel (Marlene Moore will follow developments over the next 6 months).	
4.	Make available the Navy's framework for sampling standards.	
5.	Make available the Navy's guideline manual.	
6.	Identify existing standards on sampling and measurement from other organizations (present an inventory and consider the legal/regulatory status).	
7.	Review performance-based methods.	
8.	Revise the questionnaire.	
9.	Hold a teleconference to discuss the results of the survey (in 1- 2 months).	
10.	Present a report on the survey's findings at the Third NELAC Annual Meeting in July (compile results in May; draft report in June).	
11.	For plenary session, discuss: • the importance of field sampling and measurement, • the direction of the laboratory system (movement to more field testing), and • the pending survey results.	

Attachment B

LIST OF COMMITTEE MEMBERS
Field Measurements *Ad Hoc* Committee Meeting
February 3, 1997

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